

BAKHCHISARAYTSEV, Arutyun Nikolayevich; KULICHIKHIN, N.I., retsenzent;
VOYTSEKHOVSKIY, I.M., retsenzent; IVANIN, F.D., retsenzent;
KOVAL', V.A., retsenzent; CHEREDNIK, P.Ye., retsenzent;
NIKOLAYEV, S.V., red.; SUCHILIN, A.P., red.; SERGEYEVA, N.A.,
red. 1zd-va; GUROVA, O.A., tekhn. red.

[Organization and planning of geological prospecting]Organiza-
tsia i planirovanie geologorazvedochnykh работ. Izd.2., perer.
Moskva, Gosgeoltekhizdat, 1962. 369 p. (MIRA 16:2)
(Prospecting)

BAKHCHISARLYTSEVA, M.Ye.

[Power engineering] Energetika. Izd. 2., ispr. 1 dop. Moskva,
Gos. energ. izd-vo, 1954. 268 p. (MLRA 8:1)
(Power engineering)

MANVELYAN, M.G.; KHANAMIRYAN, A.A.; BAKHCHISARAYTSEVA, S.A.;
TALIASHVILI, B.A.; MERTCHYAN, M.T.

Desiliconizing pure potassium aluminate solutions.
TSvet. met. 35 no.7:45-51 JI '62. (MIRA 15:11)
(Potassium aluminate)

MANVELYAN, M.G.; KHANAMIRYAN, A.A.; MKRTCHYAN, N.T.; BAKHCHISARAYTSEVA, S.A.;
TALIASHVILI, B.A.

Desiliconisation of pure potassium aluminate solutions in presence
of chemical additives. TSvet. met. 35 no.11:66-74 N '62.
(Potassium aluminate) (Silicon) (MIRA 15:11)

SPIT, YU,
... ..
... ..

"constituent water" of some later
the method of nuclear magnetic resonance. FKI. AN CSR 160
no. 3:68-60 Ja 165. (1984 18:3)

1. Institut fiz. chesky klimat AN SRN.

SPITSIN, V.M.; ABRAMOV, I.I.; BARUCHISARAYTSEVA, S.A.; KABANOV, V.Ya.

Basicity of some heteropoly compounds studied by infrared *spectroscopy*.
Dokl. AN SSSR 163 no.4:913-916 4q '65.

1. Institut fizicheskoy khimii AN SSSR.

(MIRA 18:8)

CHUVAYEV, V.F.; BAKHCHISARAYTSEVA, S.A.; SPITSYN, Vikt.I., akademik

Position of hydrogen ions in some heteropoly compounds studied
by means of nuclear magnetic resonance. Dokl. AN SSSR 165
no.5:1126-1129 D '65. (MIRA 19:1)

1. Institut fizicheskoy khimii AN SSSR. Submitted May 25, 1965.

BAKHCHISARAYTS'YAN, N. O.

4

The electrochemical preparation of potassium permanganate. I. Direct preparation from pyrochroite and manganese alloys. P. M. Luk'yanov and N. O. Bakhchisarayts'yan. *J. Applied Chem. (U. S. S. R.)* 12, 324-32 (in French, 1959). The electrolysis of pyrochroite in fused KOH, at temps. not below 100°C, yielded not over 10% theory of manganate. A better Ni gauze anode bag filled with pyrochroite yielded manganate. But no manganate was obtained in aq. soln. of KOH. In all cases, Ni was anode and Fe cathode. The anode potential very slightly depended on the ratio of pyrochroite to KOH. Electrolysis with an excess of KOH prevented the electrochem. oxidation of manganate to permanganate. Electrolysis with an asbestos diaphragm and a ferromanganese 100% of Mn²⁺ anode and 1.0% KOH in 12.5% K₂CO₃ aq. soln. as electrolyte yielded 20-75% of permanganate. The current yield was better for the K₂CO₃ soln. The formation of film, probably Fe and Mn oxides, on the ferromanganese anode hampered the electrolysis. Twenty-two references. II. Preparation from silicomanganese. *Ibid.* 33, 44 (in French, 345). The prepn. of permanganate by electrolysis with a silicomanganese anode, a porcelain or asbestos diaphragm gave a better yield for K₂CO₃ electrolyte than for KOH electrolyte. Thus, with the optimal concn. of KOH (30 g. l.) at the optimal c. d. of 15 amp. sq. in., the current yield was 10.3% at 25°C and 18% at 70°C, and with the opti-

mal concn. of K₂CO₃ (1 g. l.) at the same temp. as the same, the yield was 2.0% and 20.0% resp. The electrolysis without diaphragm yielded with KOH soln. only manganate (19%) and with K₂CO₃ soln., permanganate with some manganate admixed (total 21.8%). The SiO₂ film was formed on the anode only at low concn. of electrolytes and at high c. d. However, the superposition of a 0.5% pyrochroite film formation at the higher c. d. Thus, by using a 1.5 amp. sq. in. and a 1.5 amp. sq. in., the yield was 14.8% at 25°C, without diaphragm and K₂CO₃ soln. With d. c. 25 amp. and a 1.5 amp. the current yield was 10%. A. S. G. (Sov. J. Chem.)

AND SEA DETAILING LITERATURE CLASSIFICATION

Исследования в области химии и техники

Dissertation: "Electrochemical Behavior of Lead Anode."

23/6/50

Moscow Order of Lenin Chemical-Technological
Institute D. I. Kondeluyev.

80 Vecheryaya Moskva
Sum 71

DAKSHINARAYAN, Y. G.

75(1) PLAIN I ION EXPLANTION 807/165

Electro-chemicals elaborate multi-layered alloy growth, metal, Electroplating electrolyte previously

Substrate-electrolyte i electrolyte electrolyte metal (Protective, Inertness, and Special Coatings for Metals) Elzer, H. G., 1979. 424 p. 4,200 copies printed.

Editorial Board: F. E. Lavetto, F. I. Livak, and A. F. Rykic (Sup. M.); M. of Publishing House; M. S. Srobnik; Chief M. (Soviet Division, Moscow); V. E. Serebryak, Engineer.

NOTE: This book is intended for technical personnel in the field of protective coatings for metals.

CONTENTS: The papers in this collection, presented at a conference of the ITO International Group, deal with the mechanism and construction of electroplating processes, the properties of electroplated coatings, and other methods. Quality control of electroplating is also discussed. No preliminary are mentioned. References follow several of the papers.

1. H. G. Elzer, Engineer (Moscow). Application of High-layer Nickel Plating in Mass Production 37

2. A. I. Kandida, Candidate of Chemical Sciences, and G. S. Chernobrovka (Moscow). New Electrolyte for High-layer Nickel Plating 35

3. M. S. Srobnik, Candidate of Chemical Sciences (Moscow). Identification of the Electroplating Process Through the Use of a Fluorometric Electrolyte 45

4. G. S. Chernobrovka, Candidate of Chemical Sciences, and A. A. Rukhovich, Candidate of Chemical Sciences. Nickel Plating by Chemical-reduction Methods 55

5. A. I. Kandida, Engineer (Moscow). Wear- and Corrosion-resistant Coating by Lead-Nickel (Two-layer) Chrom Plating 65

6. A. I. Kandida, Candidate of Technical Sciences (Sverdlovsk). Chrom Plating at Room Temperature 75

7. A. I. Kandida, Candidate of Technical Sciences, and L. E. Dubovik, Candidate of Technical Sciences (Moscow). Electrodeposition of Iron at High Current Densities from Low-temperature Sulfuric Acid Solutions 85

8. V. E. Serebryak, Engineer (Tula). High-layer Copper Plating from Acid Electrolyte 95

9. M. S. Srobnik, Engineer (Sverdlovsk). Pyrophosphate Copper Plating of Aluminum Alloys 97

10. M. S. Srobnik, Candidate of Technical Sciences, and A. I. Kandida, Engineer (Moscow). Electroplating of Aluminum Alloys 97

11. M. S. Srobnik, Engineer (Sverdlovsk). New Alloying of Aluminum Alloys with Anomalous Regulation of the Process 108

12. G. S. Chernobrovka, Candidate of Chemical Sciences, and A. A. Rukhovich, Candidate of Chemical Sciences. A Study of Processes of Depositing Anodic Coatings with High Electrical-insulating Properties on Aluminum and Its Alloys 118

13. M. S. Srobnik, Engineer (Moscow). Deposition of Tinned Amalloy Coatings on Aluminum and Some of Its Alloys 125

14. M. S. Srobnik, Candidate of Technical Sciences (Moscow). Electroplating of Fine Coatings 131

15. M. S. Srobnik, Engineer (Moscow). Electrolytic Polishing of Metal Leads and Wire Products 139

16. M. S. Srobnik, and A. I. Kandida. Electrolytic Deposition of the Lead-Nickel Bearing Alloy 139

17. M. S. Srobnik, Engineer, and L. E. Dubovik, Engineer (Sverdlovsk). Electroplating with a Lead-Nickel Alloy in a Fluoroborohydroxide Solution 146

18. A. I. Kandida, Candidate of Technical Sciences (Sverdlovsk). Mechanism of the Action of Surface-active Substances in Electroplating 156

19. A. I. Kandida. On the Mechanism of Electrodeposition of Metals Contained in Solutions as Silyls and Complex Salts 169

20. M. S. Srobnik, Engineer (Moscow). Palladium Coating of Precision-Instrument Parts 178

BAKHENISANYA
REVAZYAN, A. A.

PHASE I BOOK EXPLOITATION SOV/7216

Sovetskaniye po elektrokhemii. 4th, Moscow, 1956.

Trudy... laborntil (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959, 66 p. Kirzats slip inserted. 2,500 copies printed. Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A. N. Frankin (Resp. Ed.) Academician, O. A. Yesin, Professor, S. I. Zhdanov (Resp. Secretary), B. M. Kabanov, Professor, Ia. M. Kolotyrkin, Doctor of Chemical Sciences, V. V. Loser, P. D. Lukovtsev, Professor, Z. A. Solov'yeva, V. V. Stender, Professor, and G. N. Florinovich; Ed. of Publishing House: E. O. Yegorov; 4th. Ed.: T. A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

OVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences, USSR, and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodes, passivation and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personal names are mentioned. References are given at the end of most of the articles.

Kravtshchikov, A. I. (Otdel'nyy Institut Khimii) 272
Krasnykh, A. I. (Otdel'nyy Institut Khimii) 272
Krasnykh, A. I. (Otdel'nyy Institut Khimii) 272
Krasnykh, A. I. (Otdel'nyy Institut Khimii) 272

Gerberich, M. A. (Deceased), and B. I. Kaganovich (Moscow State University). Study of the Mechanism of X-ray Absorption Processes by Correlating Electrochemical and Tagged-Atom Methods 277

Salygin, A. I., and G. A. Bogdanovskiy (Moscow State University). Mechanism of the Electrochemical Oxidation of Some Compounds on Platinum 282

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Dumakov, I. O., E. O. Bakhchenisanyia, and A. P. Tomilov (Moskovskiy Khimiko-Tekhnicheskii Institut Izvesti D. I. Mendeleeva-Moscow Institute of Chemical Technology named D. I. Mendeleev). Mechanism of Some Irreversible Electrochemical Reactions 292

Pomenko, A. S., L. M. Abramova and I. I. Gankina (Institut Khimicheskoy Khimii: AN USSR-Institute of Physical Chemistry AS USSR). Mechanism of the Corrosion of Iron, Magnesium, Zinc and Aluminum with the Aid of Heavy Oxygen Isotopes 299

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PART IV. ELECTRODE PROCESSES IN FUSIONS 309

Yesin, O. A. (Uralskiy politehnicheskii Institut-Ural Polytechnic Institute). Electrode Processes in Fluoride Oxides 311

Piontelli, R., O. Sternheim, M. Francini, and O. Montanelli (Italy). Investigation of Overvoltage Phenomena in Fluoro Salts 323

BAKHCHISARATTS'YAN, N.O.; SOROKIN, V.K.

Electrochemical passivation of zinc coatings. Report No:1. Trudy
MKHTI no.26:139-145 '59. (MIRA 13:9)
(Zinc) (Passivation)

BAKHCHISARAYTS'YAN, N.G.; ZAYTSEVA, T.A.

Electrochemical passivation of zinc coatings. Report No. 2.
Trudy MKHTI no.26:146-150 '59. (MIRA 13:9)
(Zinc) (Passivation)

BAKHCHISARAYTS'YAN, N.G.; SOROKIN, V.K.; SHEBUKHOVA, L.A.

Formation of black protective films on zinc in the course of its
anodic treatment in chromate solutions. Trudy MEHTI no.26:151-155
'59. (MIRA 13:9)

(Zinc) (Chromates) (Films (Chemistry))

KHOMYAKOV, V.G.; BAKHCHISARAYTS'YAN, N.G.; TOMILOV, A.P.

Mechanism of the electrolytic oxidation of acetone in alkaline
solutions. Trudy MKHTI no.26:191-198 '59. (MIRA 13:9)
(Oxidation, Electrolytic) (Acetone)

S/539/61/000/032/010/017
D247/D301

AUTHORS: Bakhchisarayts'yan, N.G., Kudryavtsev, N.T. and Kokarev, G.A.

TITLE: Investigating electrolytic nickel plating with intermittent current and with alternating current

PERIODICAL: Moscow. Khimiko-tekhnologicheskii institut. Trudy, no. 32, 1961. Issledovaniya v oblasti elektrokhemii, 266-271

TEXT: The authors studied the effects of such currents on the appearance of the plate, the current efficiency and the polarization of the nickel electrode. An electrolyte of composition $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ 215g/l, H_3BO_3 30g/l, NaF 4.2-4.5 g/l and NaCl 4 g/l was used in all the experiments. The deposit was 10 microns thick and was made on iron and brass plates 2.5x2.0 cm in size. The anode surface made of electrolytic nickel was from 2.5-5.0 times greater than the cathode surface. A platinum electrode of 0.35 cm² surface area was used in all the experiments. The appearance

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D247/D301

Investigating electrolytic ...

of the deposit was assessed visually. An oscilloscope was used for measuring polarization and current strength, and the current efficiency was found by using two copper coulometers. Short period cycles were used. For intermittent current the cycles were 0.33, 1.0 and 1.9 sec. At 20°C and a current density of 3 amp/dm², there was no observable difference in the appearance of the plate from that obtained with constant current, but the comparative current efficiency fell by 10%. The authors explained this by the diffusion of hydrogen ions into the cathodic layer of the electrolyte, during the breaks in current, producing a greater acidity round the cathode than that found under conditions of constant current. With breaks of shorter duration, the current efficiency increased but the effect was small. The rate of plating did not change with the use of intermittent current. The cathode potential reached its maximum almost immediately following connection, and on switching off, decreased sharply at first and then more slowly. It remained at greater negativity during the breaks than under stationary conditions. With alternating current, at 20°C, with a cathodic current density of 2-3.5 amp/dm², and an anodic current density of 2-3 amp/dm², a bright coating

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Investigating electrolytic ...

S/539/61/000/032/010/017
D247/D301

was obtained up to 5-7 microns thick. With increased thickness the brightness decreased. At 40°C and current density of 4-6 amp/dm², variation of the ratio of the durations of cathodic and anodic connection from 2 to 9 and a corresponding variation of the cycle time from 0.24 to 1.0sec gave no change in the appearance of the plate. The use of alternating current produced a noticeable decrease in current efficiency at the cathode. This could have been due to the ionization of hydrogen adsorbed on the cathode, taking place during anodic connection and increasing the hydrogen ion concentration round the cathode. This explanation was supported by the increase of current efficiency with the increased duration of cathodic connection, while the period of anodic connection was kept constant. Low pH values decreased the current efficiency to approximately the same extent for constant and intermittent current, while with alternating current pH values below 2.5 produced a sharper reduction. With a constant cathodic current density of 2 amp/dm², an increase in anodic current density of 3 amp/dm² made the current efficiency fall to 30%, and a further increase to 4 amp/dm² gave a reduction to 4-5% and a sharp deterioration in the quality of the plate. ✓

Card 3/4

Investigating electrolytic ...

S/539/61/000/032/010/017
D247/D301

Oscillograms for the alternating current show some cathodic depolarization in comparison with constant conditions, but if the potentials are referred to the effective current density there is no depolarization. There are 7 figures and 6 references: 6 Soviet bloc and 1 non Soviet-bloc. The reference to the English-language publication reads as follows: G.W. Jernstedt. Patent USA 2,470,775, 24.V.1949.

Card 4/4

BAKHCHISARAYTS'YAN, N.P.: DZHAFAROV, E.A.

Electrodeposition of lead dioxide from alkaline plumbite electrolytes.
Dokl.AN Azerb.SSR 17 no.9:785-788 '61. (MIRA 15:3)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni Mendeleeva.
Predstavleno akademikom AN AzSSR Yu.G.Mamedaliyevym.
(Electroplating) (Lead oxides)

(1)
BAKHCHUSARAYTS'YAN, N.G.; FIOSHIN, M.Ya.; DZHAFAROV, E.A.; KRIZOLITOVA, M.A.

7

Use of lead dioxide anodes in the electrolysis of isobutyric acid.
Zhur.prikl.khim. 35 no.7:1643-1644 J1 '62. (MIRA 15:8)
(Lead oxide) (Electrolysis) (Isobutyric acid)

BAKHCHISARATTS'YAN, N.G.; DZHAFAROV, E.A.

Use of insoluble anodes of lead dioxide in the processes of
electrochemical synthesis. Azerb. khim. zhur. no.3:109-115 '62.
(MIRA 16:12)

BAKHCHISARAYTS'YAN, N.G.; DZHAFAROV, R.A.

Internal stresses of electrolytic deposits of lead dioxide
obtained from alkaline plumbite electrolytes. Dokl. AN Azerb.
SSR 19 no.6:31-34 '63 (MIRA 17:7)

1. Institut khimii AN AzerbSSR. Predstavleno akademikom AN AzerbSSR
M.A. Dalinym.

UHRN - CR - 111, 2 1

USSR/ Miscellaneous - Incentive pay system

Card 1/1 Pub. 133 - 17/23

Authors : Bakhgorskiy, N. I., Head of the Labor and Wage Department of the
Ministry of Communications; and Vlasov, M. A., Acting Head of the
Title : Department

On the incentive pay system and remuneration of workers keeping two
(or more) professional jobs

Periodical : Vest. svyazi 11, 27 - 28, Nov 1954

Abstract : Two directives issued by the Ministry of Communications of the USSR
dealing with incentive pay, and remuneration of communication special-
ists keeping two (or more) professional jobs, are discussed.

Institution:

Submitted:

BAKHGORSKIY, N. [I.]

Regularize wages of communication workers. Sots. trud no.3:44-46
№ 157. (Wages) (MIRA 10:4)

BAKHORSKIY, N.I.

Legislation on the adjustment of pay for communication workers.
Vest.svyazi 20 no.6:17-18 Je '60. (MIRA 13:7)

1. Nachal'nik Otdela truda i zarabotnoy platy Ministerstva
svyazi SSSR.
(Telecommunication--Employees)
(Wages)

BAKHGORSKIY, N.I.

Every type of communication should give good service to the public and the national economy. Vest. svyazi 21 no.3:29-30 Mr '61.

(MIRA 14:6)

1. Nachal'nik otdela truda i zarabotnoy platy Ministerstva svyazi SSSR.

(Telephone)

(Telegraph)

BAKHGORSKIY, N.I.

New norms on the recommended number of workers in maintenance and operational centers of telecommunication enterprises. Vest. svyazi 24 no.2:30-31 F '64. (MIRA 17:4)

1. Nachal'nik otdela truda i zarabotnoy platy Ministerstva svyazi SSSR.

BAKHILIN, N. (Moskva); SLEPININ, V.

Instruction in turning. Prof.-tekh.obr. 13 no.2:21-22 F '56.
(MLRA 9:5)

1. Direktor remeslennogo uchilishcha No. 10 (for Bakhilin);
2. Prepodavatel' spetsial'noy tekhnologii tokarnogo dela (for Slepinin).

(Moscow--Turning--Study and teaching)

RAVHIL, N. S.

"Prospects for the Complex Utilization of Retic Compound
Sales," *Ravhila i Chirala Nestr*, No. 3, pp 5-57, 1954

SG: W-31 29, 2 Sep 55

SEMEVSKIY, V.N., doktor tekhn.nauk, prof.; BAKHIN, F.S., inzh.; VOLZHISKIY,
V.M., inzh.

Controlling the safety of strata bolting. Bezop.truda v prom.
4 no.12:4-5 D '60. (MIRA 14:1)

1. Nachal'nik upravleniya Severo-Zapadnogo okruga Gosgortekhnadsora RSPSR (for Bakhin).
2. Leningradskiy gornyy institut (for Volzhskiy).
(Mine roof bolting—Safety measures)

BAKHIN, P.U.

Studying moisture conditions in soils tilled by ordinary methods
and by T.S.Mal'tsev's method in 1955-1956. Izv. AN SSSR. Ser. biol.
no. 41431-44. J1-Ag '57. (MIRA 10:8)

1. Pochvennyy institut Akademii nauk SSSR
(SOIL MOISTURE) (TILLAGE)

BAKHIN, Yu.I.

Introducing the 5413 semiautomatic machine for milling racks.
Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekhn.inform.
18 no.11:17-18 N '65. (MIRA 18:12)

BAKHUR, A. I.

The age variation in the chemical composition of the leaf blades of beet. A. E. Maksimovich, A. S. Okanenko, and A. I. Bakhur. (All-Union Sugar Beet Sci. Research Inst., Kiev). *Izv. Akad. Nauk S.S.S.R., Ser. Biol.* 1955, No. 0, 29-33. With increasing age the following changes take place in the leaf of a sugar beet: rise in dry matter, total org. acids, (CO₂H), CaO, MgO, sum of K-Na-Ca-Mg; a decline of percentages of total and protein N; and decrease of the ratio (K + Na)/(Ca + Mg). Abs. wt. of K, Na, Ca, Mg, P, and SO₂, as well as pectic materials and org. acids, all show a rise with age. Most intense accumulation of dry matter corresponds to that of N and ash elements. Org. acids accumulate in parallel with excess of mineral cations. Migration of N is observed only with relatively young leaves. Improvement of plant nutrition serves to delay the flow of N into the root and thus causes a greater growth of leaf area and increased sugar content of the root. G. M. K.

(2)

USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M-5

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29937

Author : Maksimovich, A.Ye., Bakhr, A.I., Okanenko, A.S.

Inst : The All-Union Scientific Research Institute for the Sugar Beet.

Title : Sugar Beet Saccharinity in Rogard to the Steeping of Root Tissues.

Orig Pub : Fiziol. rasteniy, 1957, 4, No 2, 192-198 (resume in Eng.)

Abstract : This study was made at the All-Union Scientific Research Institute for the Sugar Beet in 1949-1953 in raising sugar beets fo varieties tending toward sugary and productive forms in vegetative tests as well as under field conditions in Kiyevskaya, Voronezhskaya, Vinnitskaya and Cherkasskaya oblasts. With the usual sugar content in the beet of 16-21% in crude weight its dry matter root

Card 1/2

- 29 -

BAKHIR, A.M.

Defense of trade-union rights in Anglo-Egyptian Sudan, Vsem.
prof.dvish. no.4:29-31 F '54. (MLRA 7:2)

1. Chlen general'noy assamblei Federatsii profsoyuzov Sudana.
(Sudan, Egyptian--Trade unions) (Trade unions--Sudan, Egyptian)

BAKHIR, L.P.

Optical pyrometry of nonuniform radiation sources, *Zhur. prikl. spekt.* 2 no.3:279-282 Mr '65. (M 15:6)

AID P - 2796

Subject : USSR/Electricity

Card 1/1 Pub. 28 - 5/13

Authors : Bakhir, Yu. V. and Ryabov, V. P.

Title : ~~Time mercury-type relay for a selfstarting electric motor operating a deep-well pump~~
Time mercury-type relay for a selfstarting electric motor operating a deep-well pump

Periodical : Energ. byul. 8, 14-15, Ag 1955

Abstract : The authors describe a relay designed by them for selfstarting of electric motors operating deep well pumps. The picture of the device is attached, and the explanation of its operation is given in the text. It has been in use since early this year at the Tuymazy oilfield of the Bashkirskaya ASSR Petroleum Association.

Institution : None

Submitted : No date

BAKHIR, Yu. V., insh.

Concerning the grounding of the pole guys of overhead lines
with voltages up to 1,000 volts. Energetik 10 no.8:20-21
Ag '62. (MIRA 15:10)

(Electric lines—Overhead)

PATRIN, A.A.; YEREMCHENKO, M.I.; RYZHAKOV, P.V.; BAKHIR, Ya.V.; DEKAPOLITOV, I.P.

Concerning the article "Mounting of wire broadcasting networks and electric power transmission lines on common poles." Prom. energ. 17 no.8:32-34 Ag '62. (MIRA 16:4)

1. Belomorskaya elektroset' Karel'skoy ASSR (for Patrin).
 2. Gosset'-elektronadzor, g. Groznyy (for Yermchenko).
 3. Glavnoye upravleniye elektrifikatsii sel'skogo khozyaystva, g. Groznyy (for Ryzhakov).
 4. Tuymazaneft' (for Bakhir).
 5. Darnitskiy setvoy rayon Yugo-Zapadnoy zheleznoy dorogi (for Dekapolitov).
- (Electric lines—Overhead) (Electric lines—Poles and towers)

BAKHIR, Yu.V., inzh.

Practice of placing compensating systems in oil fields. Prom.
energ. 19 no.6:14-15 Je'64 (MIRA 17:7)

DANILIN, A.S.; BAKHIREV, I.I., aspirant

Filter embankments. Put' i put. khoz. 8 no.1:19 '64.
(MIRA 17:2)

1. Nachal'nik mostoispytatel'noy stantsii, g. Khabarovsk
(for Danilin). 2. Khabarovskiy institut inzhenerov
zheleznodorozhnogo transporta (for Bakhirev).

BAKHIREV, N.F., kand. tekhn. nauk; GAVANIN, V.A., inz.; DANTSIG, N.M.;
KODINETS, G.A., prof.; MELYUKOV, A.N., kand. sel'khoz. nauk;
PIGAREV, N.V., doktor sel'khoz. nauk; OSETRV, P.A., kand.
tekhn. nauk; SVENTITSKIY, I.I., kand. tekhn. nauk; SOKOLOV, M.V.,
doktor tekhn. nauk; SOLUN, A.S., doktor sel'khoz. nauk;
SHARABRIN, I.G., doktor bet. nauk; SKOBELEV, V.M., kand. tekhn.
nauk; TIRKEL'TAUB, M.V., inzh.; KOLPAKOVA, Ye.A., red. izd-va;
YEPIFANOVA, L.V., tekhn. red.; SIMKINA, G.S., tekhn. red.

[Recommendations for ultraviolet irradiation of farm animals
and fowl] Rekomendatsii po ul'trafiioletovomu oblucheniiu sel'-
skokhoziaistvennykh zhivotnykh i ptits. Moskva, Izd-vo Akad.
nauk SSSR, 1962. 46 p. (MIRA 16:2)

1. Akademiya nauk SSSR. Institut biologicheskoy fiziki. Sektsiya
po ul'trafiioletovomu izlucheniyu.
(Ultraviolet rays--Physiological effect)
(Stock and stockbreeding)

BAKHIREVA, A.V., kand.med.nauk; MOROZ, Ye.Ya.

"Candidiasis" by P.N. Kashkin, Reviewed by A.V. Bakhireva, E.IA.
Moros. Sov.med. 24 no.1:152-153 Ja '60. (MIRA 13:5)
(MONILIASIS)

S/020/61/140/003/020/020
B103/3101

AUTHORS: Kozhevnikov, G. N., Mikulinskiy, A. S., and Bakhireva, L. D.

TITLE: Recovery of metallic sodium by reducing its hydroxide by carbon in vacuo

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 140, no. 3, 1961, 652-654

TEXT: Methods were studied to obtain a complete reduction of NaOH by carbon in vacuo. The demand for sodium hydride to remove scale from steel products is expected to increase. The resulting NaOH by-products should be utilized. In East Siberia, inexpensive NaOH will be recovered in the production of aluminum hydroxide from nephelite and syenite, owing to the low cost of electric power. Thus, the object of this study was the reduction of NaOH by C in vacuo. NaOH, previously melted at 400°C, was reacted with metallurgical coke (grain size 0.25 mm) in excess (20%) according to the equation $\text{NaOH} + \text{C} = \text{Na} + \text{CO} + \frac{1}{2} \text{H}_2$ (3). Preliminary tests showed that stirring of the charge does not affect the yield in metal. A non-briquetted charge (weighed portion of 15-30 g) was heated in a crucible of Cr-3 (at-3) steel. The residual pressure and the yield of Na were measured.

Card 1/3

Recovery of metallic sodium ...

S/020/61/140/003/020/020
B103/B101

The authors found that the reduction of NaOH in vacuo proceeds in two stages: a) at 600-700°C, NaOH reacts with C as follows:
 $6\text{NaOH} + 2\text{C} = 2\text{Na} + 3\text{H}_2 + 2\text{Na}_2\text{CO}_3$ (1). The reduction of soda is insignificant; b) a further increase in temperature results in an intensive interaction between soda and C: $\text{Na}_2\text{CO}_3 + 2\text{C} = 2\text{Na} + 3\text{CO}$ (4). For temperatures above 1000°C, the summational equation (3) holds (see above). Above 800°C, the yield in Na increases with rising temperature and attains a maximum at 1000°C. Duration of reaction 0.5-1.0 hr. A pressure increase from 1 to 5 mm Hg has merely a slight effect on the Na yield. On the other hand, the yield and quality of Na are considerably reduced at 10-15 mm Hg. This is attributed to oxidation of Na by CO. The purer the coke used, the lower the weight and alkali content of the residue. Therefore, the authors recommend very low-ash coke which, together with the determination of optimum quantities of initial substances, will facilitate the continuous production of Na. The yield in metallic Na was 97-98% as compared to 35-50% mentioned in the literature. There are 3 figures, 4 Soviet references and 3 non-Soviet references. The two references to English-language publications read as follows: W. Kroll, A. W. Schlechten, Trans. Electrochem. Soc., 23, 247, (1948); USA-Patent, No. 2,790,47, April 16, 1957.

Card 2/3

Recovery of metallic sodium ...

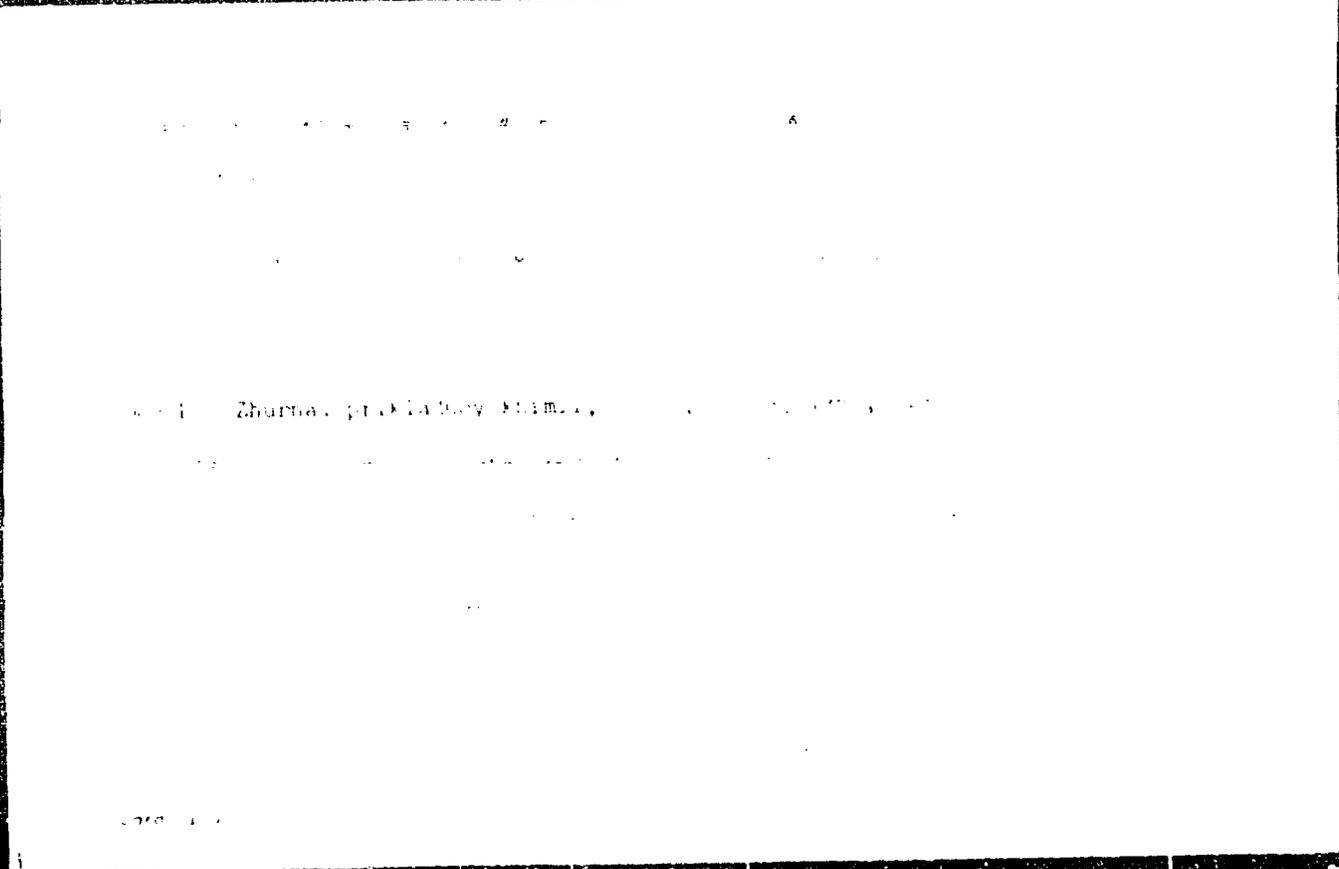
S/020/61/140/003/020/020
B103/B101

ASSOCIATION: Institut metallurgi' Ural'skogo filiala Akademii nauk SSSR
(Institute of Metallurgy of the Ural Branch of the Academy
of Sciences USSR)

PRESENTED: April 4, 1961, by S. I. Vol'fkovich, Academician

SUBMITTED: April 4, 1961

Card 3/3



L 51841-65

A 100 1000 NF 41 1000

1000 1000 1000 1000 1000 1000 1000 1000 1000 1000

A 100 1000 NF 41 1000

SUBMITTED: 09Feb62

ENCL: 00

SUB CODE: 30, MM

A 100 1000 NF 41 1000

BAKHIREV, N.F., insh.

Three-phase asynchronous motor in single-phase operation.
[Nauch.trudy] VIESKH 3:135-148 '58. (MIRA 13:4)
(Electric motors, Induction)

BAKHIREV, N.F., insh.

Single-phase electric tractor. [Nauch.trudy] VINSKH 3:149-160
'58. (MIRA 13:4)

(Tractors--Electric driving)

BAKHIREV, N. F., Candidate Tech Sci (diss) -- "The operation of a three-phase asynchronous electric motor under single-phase conditions, and a single-phase system of supplying mobile agricultural machines". Moscow, 1959. 18 pp
(Joint Academic Council of the All-Union Sci Res Inst of Mechanization of Agric VIM and the All-Union Sci Res Inst of Electrification of Agric VIESKh),
150 copies (KL, No 25, 1959, 132)

SMIRNOVA, I.S., kand.tekhn.nauk; BAKHIREV, M.P., insh.; KACHUROVA, K.P.,
zootekhnik; KUTSENKO, V.V., insh.; BEKHTIN, B.I., insh.; SVEN-
TETSKIY, I.I., insh.; KISHCHNIKOV, S.A., insh.; YEVREINOV, M.G.,
red.

[Ultraviolet irradiation of farm animals and poultry; a manual]
Ul'trafiioletovoe obluchenie sel'skokhoziaistvennykh shivotnykh
i ptits; rukovodstvo. Moskva, Otdel tekhn.informatsii VINSKha,
1959. 34 p. (MIRA 13:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut
elektrifikatsii sel'skogo khozyaystva. 2. Deyatvitel'nyy chlen
Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.
Lenina (VASKHNIL) (for Yevreinov).

(Ultraviolet rays--Therapeutic use) (Veterinary hygiene)

USSR/Microbiology - Microorganisms Pathogenic to
Humans and Animals

F-3

Abs Jour: Ref Zhur - Biol., No 18, 1958, 81596

Author : Bakhireva, A.V., Furman, O.A.

Inst : -

Title : A Method of Cultural Diagnosis of Epidermophy-
tosis.

Orig Pub: Vestn. dermatol. i venerol., 1957, No. 3, 20-21

Abstract: In diagnosis of epidermophytosis it is advisable
to inoculate the pathological material (skin
scales, nails) on a Saburo medium to which bio-
mycin (100 units per ml) has been added, which
increases the degree of growth of the causative
agent. Of 51 incubations of nails in which the
mycelium was detected microscopically, the
growth on a normal medium was found only in one

Ca. 1/2

USSR/Microbiology - Microorganisms Pathogenic to
Humans and Animals

F-3

Abs Jour: Ref Zhur - Biol., No 18, 1958, 81596

incubation, but in 35.5% of the cases on a medium with an antibiotic. On a medium with biomyacin, incubations of skin tissues produced growth in 86.2% of the cases; incubation of samples in which the fungus was not found upon microscopy, in 16.8%. In the presence of biomyacin in the nutrient medium a more rapid development of epidermophytosis takes place. --
M.I. Nakhimovskaya

Card 2/2

45

BAKHIREVA, A.Z.

Bakhireva, A.Z. "On the question of a methodology of determining the fiber content of individual stems of fiber plants", Doklady Vsesoyuz. akad. s.-kh. nauk im. Lenina, 1949, Issue 1, p. 26-32, - Biblio.: 6 items.

SO: U-3042, 11 March 53, (Letopis 'rskh Statey, No. 9, 1949)

MIKULINSKIY, A.S.; KOZHEVNIKOV, G.N.; BAKHIREVA, L.D.; VULIKH, A.I.

Vacuum-thermal separation of cesium and potassium fluorides. Izv.
SO AN SSSR no.7 Ser.khim.nauk no.2:105-107 '63. (MIRA 16:10)

1. Ural'skiy filial AN SSSR, Sverdlovsk.

BAKHIROV, U.Kh., gornyy inzhener.

Plastic ventilation ducts (From foreign journals). Gor.zhur.no.3:
61 Mr '56. (MIRA 9:7)
(Europe Western--Mine ventilation)

BAKHITOV, G. I., Mbr. Agriculture Inst., Ul'yenovsk

"Problem of the Effectiveness of the Use of Homogenous and Heterogenous
Pairing of Heavy Breeds of Horses," Agrobiol., 2, 1948.

BAKHITOV, G. I.

"The Meat Quality of the Bestuzhevskaya Breed of Cattle."
Cand Agr Sci, All-Union Sci-Res Inst of Animal Husbandry, Min
Agriculture USSR, Moscow, 1955. (ML, No 7, Feb 55)

SO: Sum. No. 631, 26 Aug 55- Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions.
(L)

Country : USSR
Category : Farm Animals. Cattle. Q
Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96882
Author : Bakhitov, G. I
Institut. : -
Title : The Accelerated Raising and Fattening of Young Stock of the Bestuzhev Breed in the Volga Region.
Orig Pub. : Molochn. i myasn. zhivotnovodstvo, 1958, No 2, 31-33
Abstract : The method of raising young stock to the age of 1¹/₂ years by using intensive feeding is superior to raising underdeveloped yearlings and animals of the same age with less intensive feeding methods.

Card: 1/1

BAKHITOV, G., kand. sel'skokhoyaystvennykh nauk

Providing constant beef supply for the population. Nauka i zhizn' op. v sel'khoz. 9 no.7:17-20 J1 '59. (MIRA 12:11)

1. Annekovskaya opyt'naya stantsiya zhivotnovodstva, Ul'yanovskaya oblast'.

(Beef cattle--Feeding and feeds)

BAKHITOV, G.I., starshiy nauchnyy sotrudnik

Possibilities of increasing the cow stock. Zhivotnovodstvo
24 no.6:67-71 Je '62. (MIRA 17:3)

1. Annenkovskaya opytnaya stantsiya po zhivotnovodstvu
Ul'yanovskoy oblasti.

AUTHOR: Bakhitov, M.B.

SOV/147-58-1-8/22

TITLE: On the Calculation of the Strength of a Wing Constructed in One Piece (K raschetu prochnosti skoshennogo kryla monolitnoy konstruktsii)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Aviatsionnaya Tekhnika, 1958, Nr 1, pp 61 - 68 (USSR).

ABSTRACT: A thin wing which is made in one piece and which has a thick skin is, from the computational point of view, similar to a cantilevered plate. Recently, there have appeared a number of calculations on the strength of such a wing, in which the plate was assumed to have constant thickness (J. Aero. Scs. Nr 10, 1950), or to have variable thickness (Ref 2); the wing has also been considered as an orthotropic plate (Ref 3). The present paper is devoted to calculating the strength of swept wings constructed in one piece with ribs parallel to the direction of flight. The wing also has stiffening stringers. The thick upper and lower surface skins can take normal and tangential stresses and these stresses may vary with the thickness of the skin. The interior of the wing is filled with continuously distributed longerons along the chord and continuously distributed ribs along the span. The wing thickness is a smooth function. The wing is loaded on its surface

Card1/2

SOV/147-58-1-8/22

On the Calculation of the Strength of a Wing Constructed in One Piece

by a transverse load and at the tip by a distributed load and a concentrated load. The differential equations for the transverse bending of the wing are set up and the case of a wing of constant profile studied in some detail. The case of a cantilevered anisotropic plate is considered as a numerical example. In a wing with a strong skin which can transmit stress in any direction, there is a stress concentration at the trailing edge at the root. There are 9 figures and 3 references, 2 of which are English and 1 a Russian translation of an English textbook.

ASSOCIATION: Kafedra stroitel'noy mekhaniki samoleta, Kazanskiy aviatsionnyy institut (Chair of Aircraft Construction Mechanics, Kazan' Aviation Institute)

SUBMITTED: October 25, 1957
1. Wings--Structural analysis

Card 2/2

53630

2220, 2209

31552

S/081/61/000/022/024/076

B110/B138

AUTHORS: Kuznetsov, Ye. V., Bakhitov, M. I.

TITLE: Interaction of dialkyl phosphoric acids, trialkyl phosphites, and unsaturated carboxylic acids with diisocyanates

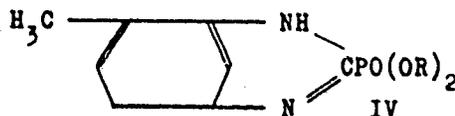
PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 208, abstract 22Zh244 (Tr. Kazansk. khim.-tehnol. in-ta, no. 29, 1960, 105-107)

TEXT: The following was obtained by the reaction of equimolar amounts of $\text{OCN}(\text{CH}_2)_6\text{NCO}$ (I) and $(\text{RO})_2\text{P}(\text{O})\text{H}$ (II) in ether: X

$\text{OCN}(\text{CH}_2)_6\text{NHC}(\text{O})\text{P}(\text{O})(\text{OR})_2$ ($\text{R} = \text{CH}_2\text{-CHCH}_2, \text{C}_2\text{H}_5, \text{n-C}_3\text{H}_7, \text{n-C}_4\text{H}_9$). By heating equimolar amounts of 2,4- $(\text{OCN})_2\text{C}_6\text{H}_3\text{CH}_2$ (III) and II for 4-5 hr, 1 equivalent weight CO_2 is separated, and the substance (IV, where $\text{R} = \text{CH}_3, \text{C}_2\text{H}_5, \text{n-C}_3\text{H}_7, \text{iso-C}_3\text{H}_7, \text{n-C}_4\text{H}_9, \text{iso-C}_4\text{H}_9, \text{iso-C}_5\text{H}_{11}$) is formed.

Card 1/2

Interaction of dialkyl phosphoric...

31552
S/081/61/000/022/024/076
B110/B138

The following was obtained by reaction of I with RCOOH : $(\text{CH}_2)_6(\text{NHCOCOR})_2$ (crystals) ($\text{R} = \text{CH}_2\text{-CH}$, $\text{CH}_2\text{-CCH}_3$, $\text{C}_6\text{H}_5\text{CH-CH}$). In the presence of ROF_a , I and II yield $(\text{CH}_2)_6[\text{NHC(O)P(O)(OR)}_2]_2$ ($\text{R} = \text{CH}_3$, C_2H_5 , $n\text{-C}_3\text{H}_7$, $\text{iso-C}_3\text{H}_7$, $n\text{-C}_4\text{H}_9$, $\text{iso-C}_4\text{H}_9$, $\text{iso-C}_5\text{H}_{11}$). By heating I with $(\text{RO})_3\text{P}$, polycondensation products are obtained under separation of CO_2 . By reaction of I and III with $(\text{HOCH}_2)_3\text{PO}$ or $(\text{HOCH}_2)_4\text{PCl}$, polymeric products are obtained. [Abstracter's note: Complete translation.]

Card 2/2

S/020/60/134/004/033/036XX
B016/B067AUTHORS: Kuznetsov, Ye. V. and Bakhitov, M. I.TITLE: Addition of the Dialkyl Phosphorous Acids to 1,5-Naph-
thylene DiisocyanatePERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 4,
pp. 830-832

TEXT: In studying the addition of the dialkyl phosphorous acid (DPA) to 1,5-naphthyl diisocyanate the authors found that the acids of this group are easily added (see scheme). In the scheme R = CH₃; C₂H₅; n-C₃H₇; iso-C₃H₇; n-C₄H₉; iso-C₄H₉; iso-C₅H₁₁; CH₂ = CH - CH₂. The possible transformation mechanism is based on the fact that first the sodium alcoholate enters the exchange reaction with DPA. The enol form of the sodium salt of DPA formed reacts with one of the carbonyl groups of the isocyanate group of the diisocyanate molecule. In this connection the intermediate (I) is formed at the beginning. (I) reacts with DPA and yields the product (II) which is the naphthalene isocyanate-1 of the dialkyl ester of the

Card 1/3

Addition of the Dialkyl Phosphorous Acids
to 1,5-Naphthylene Diisocyanate

S/020/60/134/004/033/036XX
B016/B067

amidophosphono formic acid. Subsequently, the second NCO group reacts according to the same scheme under the formation of naphthylene-1,5-bis-dialkyl ester of the acid mentioned last. The reaction proceeds in the chlorobenzene medium with short heating in the water bath. The addition products are white, crystalline substances, soluble in acetone, alcohol, dioxane, and other solvents (Table 1). The structure of the products obtained was confirmed by the synthesis of naphthylene-1,5-bis-di-n-butyl ester of the amidophosphono formic acid (according to A. Ye. Arbuzov's method) from naphthylene-1,5-bis-acid chloride of the carbamic acid and tri-n-butyl phosphite. In conclusion, the authors state that the reaction between DPA and diisocyanates proceeds readily. They thank T. P. Veselova for assistance in the experiments. There are 1 table and 3 references: 1 Soviet and 2 US.

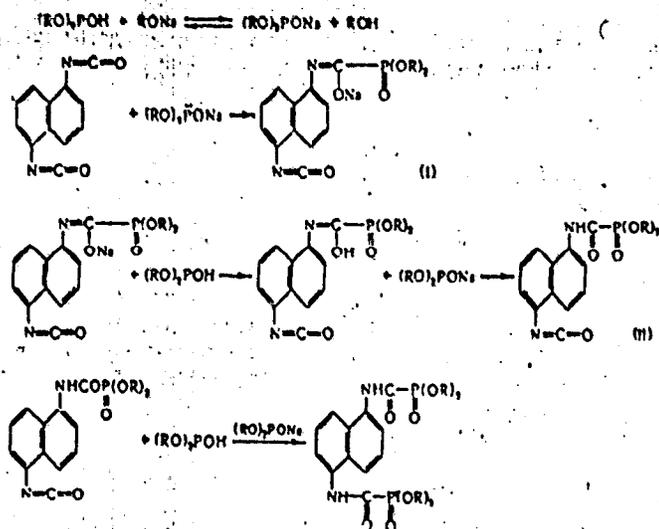
ASSOCIATION: Kazanskiy khimiko-tekhnologicheskii institut im. S. M. Kirova
(Kazan' Institute of Chemical Technology im. S. M. Kirov)

PRESENTED: May 23, 1960, by B. A. Arbuzov, Academician

SUBMITTED: May 17, 1960

Card 2/3

S/020/60/134/004/033/036XX
B016/B067



Card 3/3

27502

S/079/61/031/009/003/012

D215/D306

Addition of dialkylphosphorous ...

It has been possible to prepare hexamethylene-1,6-bis-dimethyl, diethyl and diisopropylamidophosphoformate in the pure state and in good yield; higher alkyl ester, crystallize with difficulty. Hexamethylene-1,6-bis-di-n-butyl ester could not be obtained in a crystalline form and propyl and isobutyl esters crystallized out on standing for 3-6 months. The esters are readily soluble in alcohol, ether, benzene, dioxan and carbon tetrachloride. To establish the structure of the esters obtained one, -hexamethylene-1,6-bis-diisopropylamido-phosphoformate, was produced by the A.E. Arbuzov method. The addition reaction between some substituted dialkyl-phosphorous acids and 1,6-hexamethylenediisocyanate was also studied. It has been found that the introduction into the molecule of the cyano group reduces the ability of the latter to enter into an addition reaction which may be due to the influence of the cyano group on the mobility of the electrons of the phosphorus atom. 1,6-hexamethylenediisocyanate and α -dicyanisopropyl-phosphorous acid were sealed in an ampoule and left for 2 years. After the first year, the increase in viscosity was noticed. β, β' -dichloro-

Card 2/4

Addition of dialkylphosphorous ...

27502
S/079/61/031/009/003/012
D215/D306

diethylphosphorous acid reacts faster with 1,6-hexamethylenediisocyanate under similar conditions which indicates that chlorine has a smaller effect on the mobility of electrons of the phosphorus atom. The addition reaction was conducted by introducing 0.1 mole dimethylphosphorous acid, a piece of metallic sodium and 0.05 mole 1,6-hexamethylenediisocyanate into an ampoule which was then sealed and left standing for 10 hours. After initial exothermic reaction the viscosity increased and the product crystallized within a further 2 hours. The yield of recrystallized product corresponded to 85 % yield, and its melting point was 88°C, (recrystallized from CCl₄). The preparation of hexamethylene-1,6-bis-diisopropylamidophosphoformate was conducted by reacting triisopropylphosphite with hexamethylene-1,6-bis-carbonic acid chloride. The product when combined with the addition product above did not depress its melting point. There are 1 table and 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: R.B. Fox, D.L. Venezky, J. Am. Chem.

Card 3/4

Addition of dialkylphosphorous ...

27502
S/079/61/031/009/003/012
D215/D306

Soc., 78, 1661, 1956; Reets, D.H. Chadwick, J. Am. Chem. Soc., 77, 3813, 1955.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut im. S.M. Kirova (Kazan Chemical and Technological Institute im. S.M. Kirov)

SUBMITTED: October 19, 1960

Card 4/4

KUZNETSOV, Ye.V.; BAKHITOV, M.I.

Addition of dialkylphosphorous acids to 3,3'-dimethoxy-diphenyl-4,4'-
and diphenylmethane-4,4'-diisocyanates. Dokl. AN SSSR 141 no.5:1105-
1106 D '61. (MIRA 14:12)

1. Kazanskiy khimiko-tekhnologicheskii institut im. S.M. Kirova.
Predstavleno akademikom B.A. Arbuzovym.
(Phosphorous acid) (Isocyanic acid)

PAKHITOV, M. I.

43

PHASE I BOOK EXPLOITATION

SOV/6034

Konferentsiya po khimii i primeneniyu fosfororganicheskikh soedineniy. 2d, Kazan', 1959.

Khimiya i primeneniye fosfororganicheskikh soedineniy; trudy (Chemistry and Use of Organophosphorus Compounds; Conference Transactions) Moscow, Izd-vo AN SSSR, 1962. 630 p. Errata slip inserted. 2800 copies printed.

Sponsoring Agency: Akademiya nauk SSSR, Kazansky filial.

Resp. Ed.: A. Ye. Arbusov, Academician; Ed. of Publishing House: L. S. Povarov; Tech. Ed.: S. G. Tikhomirova.

PURPOSE: This collection of conference transactions is intended for chemists, process engineers, physiologists, pharmacists, physicians, veterinarians, and agricultural scientists.

COVERAGE: The transactions include the full texts of most of the scientific papers presented at the Second Conference on the Chemistry and Use of

Card 1/14

43

Chemistry and the Use of Organophosphorus (Cont.)

SOV/6034

Organophosphorus Compounds held at Kazan' from 2 Nov through 1 Dec 1959. The material is divided into three sections: Chemistry, containing 67 articles; Physiological Activity of Organophosphorus Compounds, containing 26 articles; and Plant Protection, containing 12 articles. The reports reflect the strong interest of Soviet scientists in the chemistry and application of organophosphorus compounds. References accompany individual reports. Short summaries of some of the listed reports have been made and are given below.

TABLE OF CONTENTS: [Abridged]:

Introduction (Academician A. Ye. Arbuzov)

3

TRANSACTIONS OF THE CHEMISTRY SECTION

Gefter, Ye. L. [NII plastmass (Scientific Research Institute of Plastics, Moscow). Some Prospects for the Industrial Use of Organophosphorus Compounds

46

Card 2/4

• Chemistry and the Use of Organophosphorus (Cont.)

SOV/6034

when 0.001 to 0.1 mol of methyl iodide per mol of cyclic phosphonite is used. They form polyphosphonates with molecular weights of 270 to 3200.

Kuznetsov, Ye. V., R. K. Valetdinov, and M. I. Bakhitov [Kazanskiy khimikotekhnologicheskii institut im. S. M. Kirova (Kazan' Institute of Chemical Technology imeni S. M. Kirov)]. Substituted Organophosphorus Compounds as Monomers of High-Molecular Substances

Cyano-substituted esters of phosphorus acids have been obtained and it has been shown that carboxy-substituted and amine-substituted organophosphorus compounds and polymer products based on them can be prepared. Amine-substituted esters of phosphorus acids have been synthesized; the synthesis can be made either with chlorides of alkylphosphonic acids or with esters of phosphorus acids. Methods of synthesis of phosphorus-containing thiokols have been developed, and it has been shown that a new type of phosphorus-containing polyurethan can be obtained by the reaction of diisocyanates, phosphites, and dialkyl phosphonates.

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Card 8/14

KUZNETSOV, Ye.V.; BAKHITOV, M.I.

Reaction of dialkylphosphorous acids with 2,4-toluylenediisocyanate.
Zhur; ob. khim. 32 no.1:278-279 Ja '62. (MIRA 15:2)

1. Kazanskiy khimiko-tehnologicheskii institut.
(Phosphorous acid) (Isocyanic acid)

KUZNETSOV, YE.V., VALETDINOV, R.K., BAKHITOV, M.I.

Substituted organophosphorus compounds as monomers of high molecular substances.

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and application of organophosphorus compounds) A. YE. ARBUZOV, Ed.
Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962, 632 pp.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

SECRET

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ACCESSION NR AT5002114

mers were completely transparent colorless and glass-like products which swelled

ASSOCIATION

ASSOCIATION

ASSOCIATION

2.2

ACC NR: AP7001408

(A)

SOURCE CODE: UR/0413/66/000/021/0110/0110

INVENTOR: Kuznetsov, Ye. V.; Bakhitov, M. I.; Volkova A. V.

ORG: none

TITLE: Preparative method for polyurethans. Class 39, No. 188003 [announced by the Kazan Chemical Technology Institute im. S. M. Kirov (Kazanskiy khimiko-tehnologicheskiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 110

TOPIC TAGS: polyurethan, heat resistant, polyurethan, diisocyanate, trimethylolphosphine, pyridine, chemical synthesis

ABSTRACT: An Author Certificate has been issued for a preparative method for polyurethans with an improved heat resistance. The method consists of reacting diisocyanate with trimethylolphosphine in pyridine. [B0]

SUB CODE: 11, 07/ SUBM DATE: 06Sep65/ ATD PRESS: 5109

Card 1/1

UDC: 678.85:678. .664-9

BAKHMACH, P.T., agronom po zashchite rasteniy (Pavlovskiy rayon,
Voronezhskaya obl.)

"Review of the development of pests and diseases of farm crops in
Voronezh Province in 1961, forecast of their occurrences in 1962
and measures for their control." Reviewed by P.T.Bakmach. Zashch.
rast. ot vred. i bol. 8 no.1:63 Ja '63. (MIRA 16:5)
(Voronezh Province--Field crops--Diseases and pests)

5

BAKHMACH, P.T.

Relying on collective farm mechanics. Zashch. rast. ot vred.
1 bol. 7 no.12:6-8 D '62. (MIRA 16:7)

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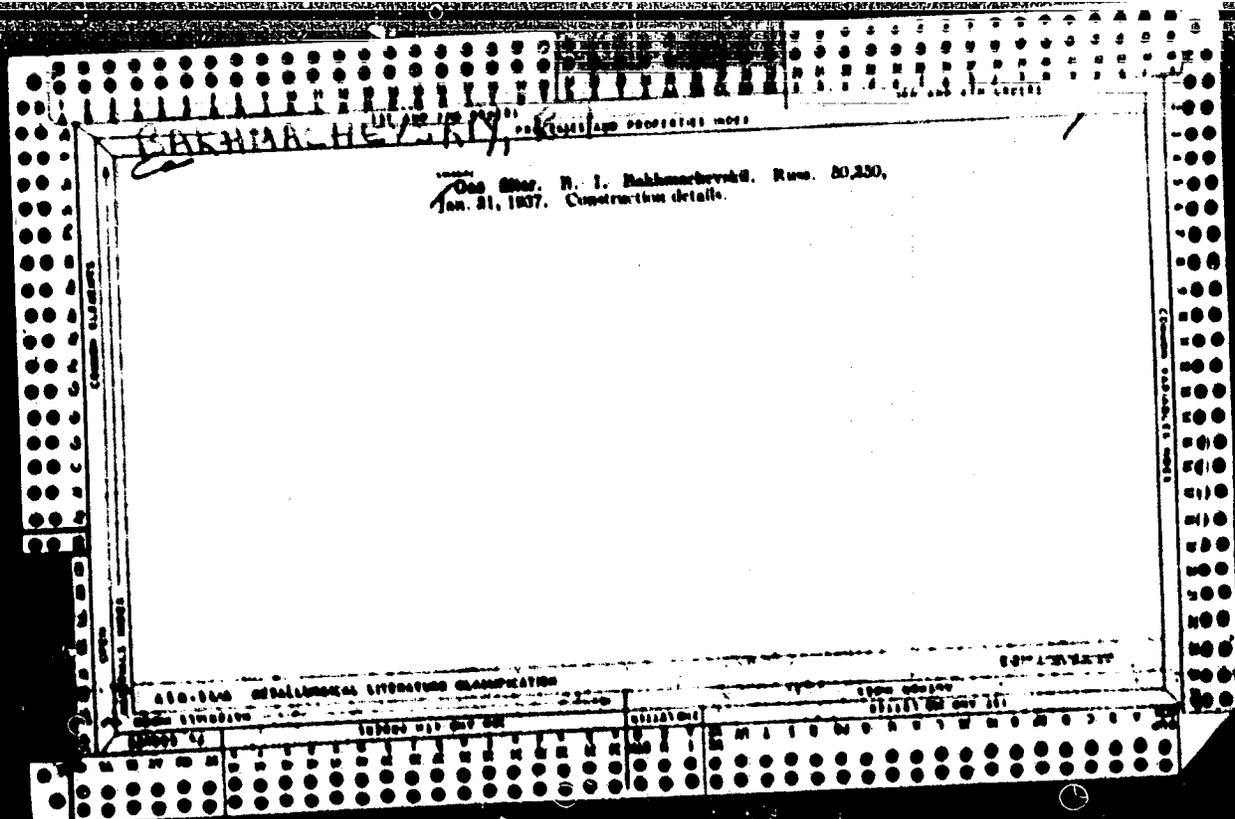
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Georgiy Pavlovich; SUSHKIN, Igor' Nikolayevich; SHCHUKIN,
Aleksy Aleksandrovich; OSIFOVA, T.V., red.izd-va;
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[Heat engineering; course in general heat engineering]
Teplotekhnika; kurs obshchei teplotekhniki. [By] B.I.Bakh-
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New method for increasing the efficiency of the operating hydra-
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✓ Effect of microorganisms on the concrete of hydrotechnical structures. A. E. Kriss, N. G. Bakhman, E. M. Kokhanskaya and E. A. Iukina. Microbiology (U.S.S.R.) 9, 267-80 (in English, 280-1) (1940); cf. C. A. 32, 7510'. - The concrete of a river dam became covered with algae by July, coinciding with the max. of "flowering" of the water. The amt. of butyric acid-forming, ammonifying, desulfurizing and denitrifying bacteria is greater on concrete covered by algae than on other parts. Thiobacteria are not assocd. with algae. Aerobic cellulose bacteria and nitrifying bacteria are restricted to certain areas. Near the areas covered by algae the C content of the water is lower and the O content higher (photosynthesis). The amt. of sulfates is also higher than in the middle of the river. The concrete covered by algae contains less CO₂ and CaO. In bottom layers of the water the amt. of bacteria is small or they are absent. The ground water was of Devonian origin. Water in the tunnel of the dam contained 85-160 mg. of Cl per l., Devonian water contains 305 mg./l/Cl, and it is concluded that the ground water was dild. by river water seeping through the dam.

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10.2000
~~5(4) 2(+)~~
AUTHOR: Raichman, N. N. 6/7/66
SOV/20-129-4-30/68

TITLE: The Transfer of Dispersed Particles by Gas Flow in the Burning of Gunpowders. ||

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 4, pp 824-826 (USSR)

ABSTRACT: The author examines the frequently made assumption that, in the burning of gunpowder, powder particles are dispersed and are burned on the gas flow. He investigates the motion of the particles on the surface of the powder charge. By deducing the equation for the conservation of mass, for the average density of the substance in the flow, for the conservation of momenta, and the conservation of energy he forms a closed system of equations which is solved by successive approximation. As an example the combustion of sulphur-free black powder at a pressure $p = 1$ atm is calculated (Table 1). The results of this calculation show that only particles that are smaller than 1μ are able to attain the velocity of the gas flow (the average acceleration a of a particle with the radius 1μ is about $270 g$), whereas particles of the size of some dozens of μ ($a \approx g$) form an

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SOV/20-129-4-30/68

The Transfer of Dispersed Particles by Gas Flow in the Burning of Gunpowders

immobile lattice, which is burned in the gas flowing through. The validity of the connections deduced for $p = 1$ is confirmed also for higher pressures. There is 1 table.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences, USSR)

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AUTHOR:

Bakhman, N. N.

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TITLE:

Limiting Cases in the ²³Combustion of Mixture Systems

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 5, pp 1079-1081
(USSR)

ABSTRACT:

The author investigates the dependence of the combustion rate of a mixture of solid fuel and solid oxidant on the particle size of the reagents. As limiting case a system in which the semispace filled with fuel borders the semispace filled with the oxidant. Inorganic oxidants were burned in thick plexiglass¹⁵ covers and the rate v of the flame along the boundary was measured as the function of the density d of the oxidant layer, of the pressure p of an inert gas (nitrogen), and of the relative density δ of the oxidant. As a variation the combustion in steel vessels, one wall of which consisted of plexiglass was investigated. In both cases v approached a limit with increasing d (Fig 1). The propagation of the flame along the boundary plexiglass-oxidant depends on the chemical nature of the latter. Figure 2 shows the dependence of v on p for $KClO_4$, $KClO_3$,¹⁴

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